Duke Power
A Duke Energy Company

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December 3, 2002

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555-001

Subject: Catawba Nuclear Station, Units 1 & 2
Docket Numbers 50-413, 50-414
Request for Exemption Pursuant to 10 CFR 50.12 - Exemption to the Cladding Material Specified in 10 CFR 50.44, 10 CFR 50.46 and 10 CFR 50 Appendix K

Pursuant to 10 CFR 50.12, Duke Energy Corporation ("Duke") requests an exemption from certain requirements of 10 CFR 50.44, "Standards for Combustible Gas Control in Light-Water-Cooled Power Reactors," 10 CFR 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Nuclear Power Reactors," and Appendix K of 10 CFR 50, "ECCS Evaluation Models." The exemption requested relates solely to the specific types of cladding material specified in these regulations for use in light water reactors. As written, these regulations presume the use of Zircaloy or ZIRLO™ fuel rod cladding. In order to use a different cladding material, a limited exemption to these regulations is needed.

Duke requests an exemption of these requirements to allow up to eight lead test assemblies (LTAs) containing fuel rods, guide thimble tubes, and instrumentation tubes fabricated with a low tin version of ZIRLO™. The exemption request is required since the tin content in the ZIRLO™ material will be below the current licensing basis of ZIRLO™ as specified in WCAP-12610-P-A, "VANTAGE + Fuel Assembly Reference Core Report." The LTAs are planned to be initially inserted into the Catawba Nuclear Station (CNS) Unit 1 Cycle 15 core in non-limiting core locations during its next refueling outage. This refueling outage is scheduled to begin in the fall of 2003.

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An optimization of ZIRLO™ corrosion resistance is being pursued to support the improved fuel performance and reliability at increasing burnup levels. Available industry data indicates that lower tin content should enhance the in-reactor corrosion resistance. The licensing basis for ZIRLO™, as defined in WCAP-12610-P-A, specifies the tin composition as being between 0.80% and 1.20%. The proposed level of tin composition in the LTAs to be used at Catawba will be nominally below the lower bound licensed limit of 0.80%. The CNS Technical Specifications and Updated Final Safety Analysis Report (UFSAR) allow for irradiation of limited numbers of lead test assemblies, so changes to the Technical Specifications and UFSAR are not required.

Details documenting the acceptability of the low tin ZIRLO™ LTAs is provided in Attachment 1 (Proprietary version) and Attachment 2 (Non-Proprietary version) to this letter.

As demonstrated in the Attachment 1 and 2 to this letter, the exemption requested is authorized by law, presents no undue risk to public health and safety, is consistent with common defense and security and is supported by special circumstances.

Duke requests that this exemption request be reviewed and approved by April 15, 2003, in order to support fuel procurement and delivery for CNS Unit 1 Cycle 15. This exemption request does not contain any regulatory commitments.

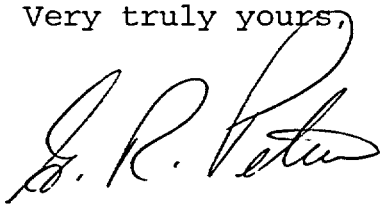
As Attachment 1 contains information proprietary to Westinghouse Electric Company, a BNFL group company ("Westinghouse"), it is supported by an affidavit signed by Westinghouse, the owner of the information as documented in Attachment 3 of this letter. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.790 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.790 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse affidavit should reference CAW-02-1577 and should be addressed to Henry A. Sepp, Manager of Regulatory and Licensing Engineering, Westinghouse Electric Company LLC, P.O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

If there are any questions regarding this request, please contact Randall Hart at (803) 831-3622.

Very truly yours,



G. R. Peterson

RDH/s

Attachments

xc (with attachments):

L.A. Reyes (**Non Proprietary Version**)
U.S. Nuclear Regulatory Commission
Regional Administrator, Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

Senior Resident Inspector (CNS) (**Non Proprietary Version**)
U.S. Nuclear Regulatory Commission
Catawba Nuclear Station

R. E. Martin (**Non Proprietary Version**) (addressee only)
NRC Senior Project Manager (CNS)
U.S. Nuclear Regulatory Commission
Mail Stop O8-G9
Washington, D.C. 20555-0001

ATTACHMENT 2

Request for Exemption From the Provisions of
10 CFR 50.44, 10 CFR 50.46, and 10 CFR 50 Appendix K
For Eight Lead Test Assemblies (LTAs)
and Supporting Justification

Catawba Nuclear Station
Units 1 and 2

[Proprietary information is enclosed in brackets.
Superscripts a, b, and c
refers to Affidavit paragraphs 4(ii)(a), 4(ii)(b),
4(ii)(c)]

Purpose

The purpose of this attachment is to provide supporting justification for an exemption request related to the use of "low tin" ZIRLO™ Lead Test Assemblies (LTAs). 10 CFR 50.44, "Standards for combustible gas control system in light-water-cooled power reactor," and 10 CFR 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors," specifically refer to fuel with Zircaloy or ZIRLO cladding, and paragraph I.A.5 of 10 CFR 50 Appendix K, "ECCS Evaluation Models," references an analysis which utilizes the Baker-Just equation which assumed use of a zirconium alloy different than "low tin" ZIRLO™ used in the LTAs. Therefore, 10 CFR 50.44, 10 CFR 50.46, and 10 CFR 50 Appendix K do not specifically apply to the proposed LTAs since the composition of tin in the LTAs will be nominally [ ] [a, c] which is below the lower bound licensed limit (i.e., 0.80%) of ZIRLO™ as specified in Appendix A of WCAP-12610-P-A, "VANTAGE + Fuel Assembly Reference Core Report," dated April 1995 (i.e., Reference 1).

Background

As the nuclear industry pursues longer operating cycles with increased fuel discharge burnups and more aggressive fuel management, the corrosion performance requirements for the nuclear fuel cladding becomes more demanding.

Available industry data from the American Nuclear Society, the International Atomic Energy Agency, the Electric Power Research Institute, and Westinghouse indicate that corrosion resistance improves for cladding with a lower tin content. The optimum tin level provides a reduced corrosion rate while maintaining the benefits of mechanical strengthening and resistance to accelerated corrosion from abnormal chemistry conditions. In addition, fuel rod internal pressures (resulting from the increased fuel duty, use of integral fuel burnable absorbers (IFBAs) and corrosion/temperature feedback effects) have become more limiting with respect to fuel rod design criteria. By reducing the associated corrosion buildup and thus minimizing temperature feedback effects, additional margin to fuel rod internal pressure design criteria is obtained.

To meet these needs, Westinghouse Electric Company developed a lead test assembly (LTA) program in cooperation with Duke. One element of the LTA program is the use of a "low tin" ZIRLO™ cladding and structural material. "Low tin" ZIRLO™ LTAs implemented at the Byron Station have previously received exemption approval from the NRC with respect to 10 CFR 50.44 and 10 CFR 50.46, and 10 CFR 50 Appendix K (Reference 2). These LTAs have resided in the Byron units for two cycles. As part of the LTA program, Duke and Westinghouse plan to include "low tin" ZIRLO™ in eight LTAs to be initially inserted into the CNS Unit 1 Cycle 15. The Catawba LTAs will use a "low tin" ZIRLO™ material with a slightly lower nominal tin content [ ] [a, c] than the Byron Station LTAs [ ] [a, c].

The CNS Units 1 and 2 Technical Specification, Section 4.2.1, "Fuel Assemblies," specifies that each fuel assembly shall consist of a matrix of ZIRLO™ or Zircaloy fuel rods. Since the LTA ZIRLO™ cladding material will have a tin composition below that currently licensed in WCAP-12610-P-A, an exemption from 10 CFR 50.44, 10 CFR 50.46, and 10 CFR 50, Appendix K is required. It has been determined by Westinghouse [

] [a, b, c]. Therefore, Westinghouse will perform a loss-of-coolant accident (LOCA) evaluation of the Catawba LTAs using existing LOCA methods prior to implementation to ensure the LTAs are bounded by the current analysis of record. The Technical Specifications specifically allow the use of LTAs, thus no additional technical specification

changes are required for the use of these LTAs utilizing "low tin" ZIRLO™ material.

Technical Justification of Acceptability

Duke and Westinghouse will jointly perform evaluations of the LTAs during the development program phase. These evaluations will include both testing and analyses, and address all aspects of safety, including mechanical, neutronic, thermal-hydraulic, transient, and LOCA accident analyses and will cover all of the design feature changes for the LTAs. The evaluations pertinent to the "low tin" ZIRLO™, for which this exemption request is being made, are summarized below:

- Mechanical evaluations of the Catawba LTAs with respect to criteria that govern acceptability considering its mechanical design will be performed. The same design methods utilized for the current robust fuel assembly (RFA) fuel will be used. No new or altered design limits for purposes of 10 CFR 50, Appendix A, General Design Criterion (GDC) 10, "Reactor Design," need to be applied or are required for this program. A fuel rod design evaluation will be performed for the Catawba LTAs. The objective of this evaluation will be to show that all fuel rod design criteria (i.e., specified acceptable fuel design limits as required by GDC 10) would be met. With respect to the mechanical evaluations, inclusive of material properties, three specific areas would be potentially impacted by the "low tin" ZIRLO™. These areas are material properties, corrosion and thermal creep.

  * Material Properties: [

] [a, b, c].

* Corrosion: [

] [a, b, c].

* Thermal Creep: [

] [a, b, c]. This design criteria will be confirmed in the CNS cycle specific reload safety evaluations.

- Duke has performed nuclear design evaluations of the impact of the LTAs on the nuclear design. The standard reload methodologies can be used to model the LTAs. The features of the LTAs do not challenge the validity of the standard methodologies. Duke will use the standard reload methodologies for the Catawba Station reload design containing the LTAs and will assure the LTAs are not placed in limiting core locations.

- Thermal-hydraulic, loss-of-coolant accident (LOCA) and non-LOCA transient safety analysis evaluations will be performed for the LTAs. These evaluations will confirm that the LTAs will be bounded by the current analyses of record and will be documented in the safety evaluation for CNS Unit 1 Cycle 15.

Justification of Exemption and Special Circumstances

10 CFR 50.12, Specific exemptions," states that the Nuclear Regulatory Commission may grant exemptions from the requirements of the regulations of this part provided three conditions are met. The three conditions are: 1) the exemption is authorized by law, 2) the exemption will not present an undue risk to the health and safety of the public, 3) the exemption is consistent with the common defense and security. In addition, the Commission will not consider granting an exemption unless special circumstances are present.

The requested exemption to allow the use of "low tin" ZIRLO™ cladding material rather than Zircaloy or ZIRLO™ in the LTAs to be inserted in the Catawba Nuclear Station satisfies these criteria as described below.

1. This exemption is authorized by law

As required by 10 CFR 50.12(a)(1), this requested exemption is "authorized by law". The selection of a specific cladding material in 10 CFR 50.44, 10 CFR 50.46, and implied in 10 CFR Part 50, Appendix K, was adopted at the discretion of the Commission consistent with its statutory authority. No statute required the NRC to adopt this specification. Additionally, the NRC has the authority under Section 50.12 to grant exemptions from the requirements of Part 50 upon showing proper justification. Further, it should be noted that, by submitting this exemption request, Duke Power does not seek an exemption from the acceptance and analytical criteria of 10 CFR 50.44, 10 CFR 50.46, and 10 CFR Part 50, Appendix K. The intent of the request is solely to allow the use of criteria set forth in these regulations for application to the "low tin" ZIRLO™ cladding material.

2. This exemption will not present an undue risk to public health and safety

The LTA safety evaluation will ensure that these acceptance criteria are met following the insertion of LTA containing "low tin" ZIRLO™ material. Fuel assemblies using "low tin"

ZIRLO™ cladding will be evaluated using NRC-approved analytical methods and will address the changes in the cladding material properties. The safety analysis for the Catawba Nuclear Station is supported by the applicable technical specifications. The Catawba reload cores containing "low tin" ZIRLO™ cladding will continue to be operated in accordance with the operating limits specified in the technical specifications. As required by the technical specifications, the LTAs utilizing "low tin" ZIRLO™ cladding will be placed in non-limiting core locations. Thus, the granting of this exemption request will not pose an undue risk to public health and safety.

3. This exemption is consistent with common defense and security

As noted above, the exemption request is only to allow the application of the aforementioned regulations to a slightly different cladding material. All of the requirements and acceptance criteria will be maintained. The special nuclear material in these assemblies will continue to be handled and controlled in accordance with approved procedures. Use of the LTA in CNS Units 1 and 2 will not affect plant operations and is consistent with the common defense and security. As noted above, the exemption request is only to allow the application of the aforementioned regulations to a different, more advanced, cladding material. All of the requirements and acceptance criteria will be maintained. Accordingly, the grant of such a request is consistent with the common defense and security.

Special circumstances support the issuance of an exemption

10 CFR 50.12(a)(2) states that the NRC will not consider granting an exemption to the regulations unless special circumstances are present. The requested exemption meets the special circumstances of 10 CFR 50.12(a)(2)(ii) which states in that, "Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule." In this particular circumstance, application of the subject regulations is not necessary to achieve the underlying purpose of the regulations.

The underlying purpose of 10 CFR 50.44 is to ensure that there is an adequate means of controlling generated hydrogen. The hydrogen produced in a post-LOCA scenario comes from a metal-water reaction. Tests performed by Westinghouse on the "low tin" ZIRLO™ alloy have demonstrated that the reduction in tin content has an [

] [a, c] versus current ZIRLO™. Therefore, the use of "low tin" ZIRLO™ will have no significant effect on current assessments of hydrogen gas production.

10 CFR 50.46 identifies acceptance criteria for ECCS performance at nuclear power plants. Due to the similarities in the material properties of the "low tin" ZIRLO™ and current ZIRLO™, the current ECCS analysis approach remains applicable and unchanged. Westinghouse will perform a LOCA evaluation of the Catawba LTAs using existing LOCA methods prior to implementation to ensure the LTAs are bounded by the current analysis of record. Therefore, it can be concluded that the ECCS performance of the Catawba Nuclear Station will not be adversely affected by the insertion of eight "low tin" ZIRLO™ LTAs.

The intent of 10 CFR 50, Appendix K, paragraph 1.A.5 of Appendix K to 10 CFR Part 50 is to apply an equation for rates of energy release, hydrogen generation, and cladding oxidation from a metal-water reaction which that conservatively bounds all post-LOCA scenarios (i.e., the Baker-Just equation). Application of the Baker-Just equation has been demonstrated to be appropriate for the "low tin" ZIRLO™ alloy. Due to the similarities in the composition of the low tin ZIRLO™ and current ZIRLO™, the application of the Baker-Just equation will continue to conservatively bound all post-LOCA scenarios.

Conclusion

10 CFR 50.44, and 10 CFR 50.46, and 10 CFR 50, Appendix K only apply to the use of fuel rods clad with Zircaloy or ZIRLO™. 10 CFR 50.44, and 10 CFR 50.46, and 10 CFR 50, Appendix K do not apply to the use of the proposed "low tin" ZIRLO™ LTAs since the composition of tin in these fuel rods will be nominally [ ] [a, c] which is below the lower bound of the licensed licensing limit (0.80%). The composition of tin is less than the licensing basis for

ZIRLO™ (i.e., 0.80%) as defined in WCAP-12610-P-A. In addition, paragraph I.A.5 of 10 CFR 50 Appendix K, "ECCS Evaluation Models," references an analysis which utilizes the Baker-Just equation which assumed use of a zirconium alloy different than "low tin" ZIRLO™ used in the LTAs.

In order to support enhancements of the ZIRLO™ material with improved corrosion resistance, an exemption from the requirements of 10 CFR 50.44, 10 CFR 50.46, and 10 CFR 50, Appendix K is requested. As required by 10 CFR 50.12, the requested exemption is authorized by law, does not present undue risk to public health and safety, and is consistent with common defense and security. Therefore, granting approval of this exemption request does not violate the underlying purpose of the rule and special circumstances exist to justify the approval of an exemption from the subject requirements.

References:

1) Davidson, S. L. and Nuhfer, D. L. (Eds.), "VANTAGE + Fuel Assembly Reference Core Report," WCAP-12610-P-A, April 1995.

2) Letter from Mr. J. B. Hickman (NRC) to Mr. O. D. Kingsley, (President, Nuclear Generation Group, Commonwealth Edison Company), "Issuance of Exemption from the Requirements of 10 CFR 50.44, 10 CFR 50.46, and 10 CFR Part 50, Appendix K - Byron Station, Units 1 and 2 (TAC Nos. MA3930 and MA3931)," February 26, 1999.

ATTACHMENT 3

Application for Withholding Proprietary
Information from Public Disclosure
Westinghouse Letter CAW-02-1577

Westinghouse

Westinghouse Electric Company
Nuclear Services
P.O Box 355
Pittsburgh, Pennsylvania 15230-0355
USA

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Direct tel: 412/374-5282
Direct fax: 412/374-4011
e-mail: Sepp1ha@westinghouse.com

Attention: J. S. Wermiel, Chief
Reactor Systems Branch
Division of Systems Safety and Analysis

Our ref: CAW-02-1577

November 15, 2002

APPLICATION FOR WITHHOLDING PROPRIETARY INFORMATION FROM PUBLIC DISCLOSURE

Subject. Catawba Nuclear Station, Units 1 & 2, Docket Numbers 50-413, 50-414, Request for Exemption Pursuant to 10 CFR 50.12 - Exemption to the Cladding Material Specified in 10 CFR 50.44, 10 CFR 50.46 and 10 CFR 50 Appendix K

Dear Mr. Wermiel:

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-02-1577 signed by the owner of the proprietary information, Westinghouse Electric Company LLC, a Delaware limited liability company ("Westinghouse"). The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.790 of the Commission's regulations.

Accordingly, this letter authorized the utilization of the accompanying Affidavit by Catawba Nuclear Station.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-02-1577, and should be addressed to the undersigned.

Very truly yours,

Henry A. Sepp, Manager
Regulatory and Licensing Engineering

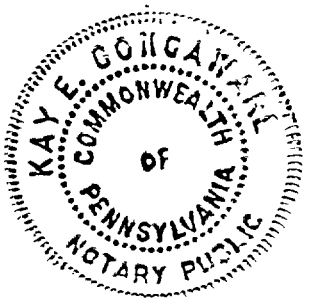
AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

ss

COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared Henry A. Sepp, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC, a Delaware limited liability company ("Westinghouse") and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:



Henry A. Sepp, Manager
Regulatory and Licensing Engineering

Sworn to and subscribed
before me this 15th day
of November, 2002.

Notary Public

Notarial Seal
Kay E. Gongaware, Notary Public
Monroeville Boro, Allegheny County
My Commission Expires Feb. 7, 2005
Member, Pennsylvania Association of Notaries

(1) I am Manager, Regulatory and Licensing Engineering, in Nuclear Services, of the Westinghouse Electric Company LLC, a Delaware limited liability company ("Westinghouse") and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rulemaking proceedings, and am authorized to apply for its withholding on behalf of the Westinghouse Electric Company.

(2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.790 of the Commission's regulations and in conjunction with the Westinghouse application for withholding accompanying this Affidavit.

(3) I have personal knowledge of the criteria and procedures utilized by the Westinghouse Electric Company in designating information as a trade secret, privileged or as confidential commercial or financial information.

(4) Pursuant to the provisions of paragraph (b)(4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.

(i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.

(ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

(a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

(b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.

(c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product

(d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.

(e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.

(f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

(a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.

b) It is information which is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.

c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

(d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.

(e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.

(f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.

(iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.790, it is to be received in confidence by the Commission.

(iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.

(v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in "Catawba Nuclear Station, Units 1 & 2, Docket Numbers 50-413, 50-414, Request for Exemption Pursuant to 10 CFR 50.12 - Exemption to the Cladding Material Specified in 10 CFR 50.44, 10 CFR 50.46 and 10 CFR 50 Appendix K," for information in support Catawba Nuclear Station, Units 1 & 2 exemption request to the cladding material specified in 10 CFR 50.44, 10 CFR 50.46 and 10 CFR 50 Appendix K submittal to the Commission, transmitted via Catawba Nuclear Station letter and Application for Withholding Proprietary Information from Public Disclosure, H. A. Sepp, Westinghouse, Manager Regulatory and Licensing Engineering to the attention of J. S. Wermiel, Chief, Reactor Systems Branch, Division of Systems Safety and Analysis. The proprietary information provides the technical assessment for the exemption request.

This information is part of that which will enable Westinghouse to:

(a) Provide technical assessment for the exemption request.

(b) Assist customers to obtain license changes.

Further this information has substantial commercial value as follows:

(a) Westinghouse can use this information to further enhance their licensing position with their competitors.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar technical evaluation justifications and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended for developing the enclosed improved core thermal performance methodology.

Further the deponent sayeth not.

Proprietary Information Notice

Transmitted herewith are proprietary and non-proprietary versions of documents furnished to the NRC. In order to conform to the requirements of 10 CFR 2.790 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.790(b)(1).

Copyright Notice

The documents transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies for the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.790 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection not withstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond these necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.